

Monitoring for the Brown Marmorated Sting Bug using pheromone-baited traps

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The invasive insect pest Brown Marmorated Stink Bug (BMSB), *Halyomorpha halys*, has been reported to be in Missouri since 2013 (only a few specimens were found that year, a few more in 2014). However, in the fall of 2015 one nymph and dozens of adult BMSB were found in pheromone-baited traps in Ferguson area and home-owners from St. Louis and neighboring counties indicated the presence of BMSB aggregations in homes or structures. Further reports received during the first months of 2016 indicate that BMSB has become established in the eastern region of the State. We suspect this might be the case in other regions but pheromone-baited traps have not been deployed state-wide.

BMSB is a voracious plant eater that can cause serious economic damage to fruits and vegetables, and to some agronomic and ornamental crops. Preferred fruit crops are peach, Asian pear, pear, apple, cherry, raspberry, grape, and currant. Some agronomic crops that can be damaged by this pest are soybean and corn. Among vegetables, BMSB seems to prefer green beans, asparagus, and peppers. Crabapple, persimmon, catalpa, walnut, maple, basswood, sweet gum, redbud, honeysuckle, and American holly are only some of the ornamental trees / shrubs that can be used by BMSB to feed and reproduce.

Based on the above, and given the threat this insect poses to fruits, vegetables, agronomic crops, and ornamentals, it is very important to monitor for BMSB in 2016. AgBio is one of various companies that sell the BMSB pheromone lure. Its commercial name is **“Stink Bug Xtra Combo, Broad Spectrum 5-7 week lure”**. It attracts Brown, Brown Marmorated, Conchuela, Consperse, Dusky, Green (*Acrosternum*), Harlequin, and Red Shouldered stink bugs.

Monitoring of BMSB is pretty straight forward and entails the following (see next page):

PROTOCOL FOR SETTING UP TRAPS TO MONITOR FOR BMSB IN MISSOURI

(modified from Dr. Tracy Leskey, USDA ARS, Kearneysville, WV)

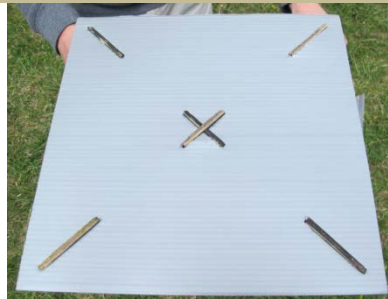
1. Trap used is a black pyramidal trap coupled with a capturing device. *Stink bugs are visually attracted to tree silhouettes, so pyramid traps represent tree-trunk mimics.*



2. Separate the flanges of the top-split trap section to permit the bottom-split section to slide beyond the locking tabs, then slide the two trap pieces together.



3. Attach the plastic square to the bottom of the pyramid base using the tabs and notches (if available). *This is to create a platform that will minimize weed growth over the trap.*



4. Select a site that will permit the trap to sit directly upright and firmly on the ground at all four corners. Push a spike through the loop of each of four zip ties, roughly halfway into the ground. Tighten each corner with zip tie or wire.



5. Hammer the spikes the rest of the way into the ground. The zip ties will catch the head of the spike and hold the trap securely to the ground. Occasionally, zip ties may break at this step.



6. Place pheromone lure inside the capturing jar. Snap the funnel onto the jar, aligning the holes in the jar with the holes in the funnel. A Bungee Cord will add extra stability.



7. Inspect traps once a week, if possible. Even if no stink bugs are seen inside the capturing jar, it is important to remove it to make sure the entrance hole is not being blocked by spider webs. If stink bugs are captured, place them inside a zip-lock bag labeled with location and date and frozen. If help is needed to identify the stink bug(s) captured, contact your regional Extension office.